Cable Address: ARMLABS

Phone: CHapman 5-2391

TRADE MARK

ARMOR LABORATORIES, INC.
538 Commercial Street
Glendale, California

J. W. L. TODD
Manufacturers' Sales Service
Dickson and North Broadway
St. Louis, Missouri
Phones: Garfield 4065
Night Republic 0806

March 11, 1943

Mr. Victor Volkmann, Architect
3869 Park Avenue
St. Louis, Missouri

Dear Mr. Volkmann:

Interior Walls of Haydite Cement and Cinder Blocks: You can lastingly Waterproof while you Sand Finish these with Armor Coat. This Sand Finish is quite equal to a Plaster Finish in Decorative Effect. Armor Coat is equally effective outside.

Just add 25% clean 80-Mesh Silica Sand and scrub it on. Any pitted surface is smoothly filled.

Thirteen Tons were lately used as above on the U.S.H.A. Housing Job at Lubbock, Texas.

Available in White, Oyster White and eight Beautiful Pastel Colors.

Won't this idea fit into one of your projects soon?

Costing less than cheap oil paint, Armor Coat Decorates while it Lastingly Waterproofs - two jobs for the cost of one.

Armor Coat is Warehoused and Distributed by The Missouri Steel & Wire Company, 1400-1410 North Broadway - PHONES: CEntral 2890-91-92.

Yours very truly,

J W L Todd

District Sales Representative.

A.I.A. File No. **25C** 21-22-23

Armor Coat

Manufactured by
ARMOR LABORATORIES, Inc.
GLENDALE, CALIFORNIA

ARMOR LABORATORIES, INC.

Specialized Paints and Coatings for Residential, Commercial and Industrial Applications

538 Commercial Street, GLENDALE, CALIF.

ARMOR COAT

A Decorative, Waterproof Finish for Home and Building Exteriors of Stucco, Unglazed Brick, Concrete, Unglazed Tile, or any other Porous Building Material—and for Swimming Pools, Reservoirs, and Fish Ponds.

Waterproofs Leaking Basement Walls, Retaining Walls, Tunnels, Subterranean Rooms, Cisterns, etc., *simply by coating the inside of the walls.*

WHAT ARMOR COAT IS

Armor Coat is a cement-base mineral compound in the form of a dry powder, ready for application upon the addition of water. It is compounded according to a secret formula. Included in the ingredients are waterproofing agents and lime-proof pigment colors.

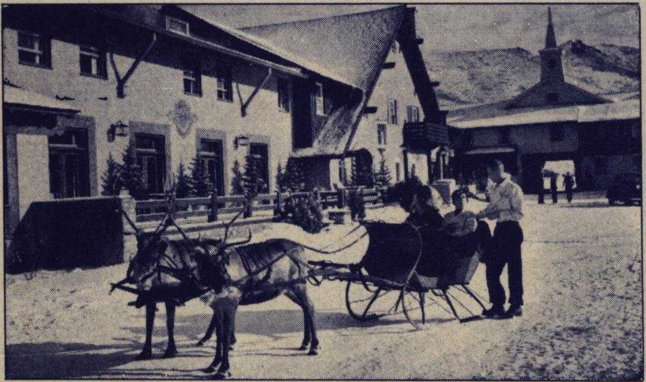
Armor Coat is believed to be the only material of its type, entirely distinct from "brush coats" and so-called "waterproof" cement paints in its physical and chemical character. It contains no oils. Armor Coat can be mixed with water for use as a putty-like paste, or further reduced to the proper consistency for application like any other decorative finish.

WHY ARMOR COAT WATERPROOFS

Armor Coat does not itself absorb water after the water used in mixing has evaporated from the surface coated with Armor Coat. Its chemical nature changes in such a manner that there are no longer any absorptive elements in it.

Armor Coat has an affinity for any surface containing lime or cement. It seals such a surface completely because the Armor Coat material, as applied, is composed of myriad needle-like crystals which interlock with the surface. As the Armor Coat flows on in aqueous solution, these needle-like crystals penetrate the interstices of the masonry, filling the pores and interlacing with the irregularities of the surface.

Armor Coat's physical and chemical nature results in the coating thus formed actually becoming a part of the surface. It is stone-like in character and becomes harder and harder with age. Being non-absorbent, and completely blanketing the surface, water cannot get into or through Armor Coat.



A Corner of the Union Pacific R. R. Co.'s Swiss Village at Sun Valley, Idaho

The entire Swiss Village and the Challenger Inn are Armor Coat protected
W. T. WELLMAN, Omaha, Neb., Architect
J. V. MCNEIL Co., Los Angeles, Contractor

WHERE TO USE ARMOR COAT

Armor Coat is for both exterior and interior use. It is not to be regarded as simply a waterproofing material, it purposely having been created as a decorative exterior finish that provides waterproofing as an extra advantage. However. for application to interior masonry walls, its decorative quality can be disregarded, considering it strictly on its unusual merits as a waterproofing agent.

As a Decorative Exterior Finish

Armor Coat can be applied to new or old homes and buildings built of stucco, brick, concrete, unglazed tile—any porous masonry. Costing less than the cheapest oil paints, it can be used for the most modest of homes, as well as mansions. It is an economical, durable finish for buildings of all types, having the suitable masonry walls. It provides beauty of finish that gratifies the most exacting owner.

For Strictly Waterproofing Applications

Where seepage or leakage occurs, or is likely to occur, in a wall, application of Armor Coat assures lasting protection without the necessity of expensive or elaborate precautions. It is merely applied to the inside of the walls—not on the soil side. Armor Coat seals against hydrostatic pressure, therefore it can be used with confidence not only where mild seepage may occur, but on basement walls, retaining walls, or any wall subject to contact with heavy drainage.

Miscellaneous Applications

Wherever contact with water, or possible appearance of moisture, present the problem of what kind of "paint" to use, Armor Coat provides the answer to how to seal the water out or in. Swimming pools, reservoirs, fish ponds, cisterns, etc., with concrete walls coated with Armor Coat, not only have a waterproof coating, but one of marked beauty as well.

Prevents Buckling of Linoleum

The familiar problem of linoleum buckling after being applied to concrete floors is due to water seeping through, or natural condensation of water under the floor covering. The moisture softens the adhesive. On grades this is especially troublesome because of the tendency of the linoleum to creep. Application of Armor Coat to the floor precludes this trouble completely, as it seals out the water that might otherwise seep through. Also, linoleum bonds readily to the Armor Coat coating, therefore the condensation of water under the linoleum is prevented.

The cost of laying a concrete floor to be covered with linoleum is considerably less if Armor Coat is to be applied. An ordinary poured floor serves the purpose, it not being necessary to steel-trowel a floor to which Armor Coat is to be applied. A smooth, hard floor already laid must be etched with muriatic acid before applying Armor Coat. Two coats of Armor Coat are sufficient.

This is a reprint of our catalog p
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ARMOR COAT WATERPROOFS AGAINST THE MOST SEVERE RAINFALL, SEEPAGE OR LEAKAGE

In laboratory tests Armor Coat has withstood hydrostatic pressure many times greater than ever possible to be encountered in actual service. Armor Laboratories, Inc., their representatives and distributors, have in their possession documentary proof and letters representing many cases wherein Armor Coat has held back heavy drainage.

These laboratory tests and actual applications exceed by far, of course, the waterproofing requirements of an exterior wall subject only to rainfall. However, they serve to indicate that the owner of a home or building coated with Armor Coat can be sure that the inside walls will never be damp—in fact, that the rain will never get beyond the outside surface.

The greatest significance of Armor Coat's proven performance lies in the assurance of absolute waterproofing for retaining or subterranean walls where seepage or leakage may occur sooner or later because of natural conditions.

APPLICABLE AND DURABLE IN ANY CLIMATE

Armor Coat has proved itself in all types of climates. Neither the torrential rain of the tropics, the parching dryness of the arid southwest, the bitter cold of the far north, nor broiling heat in all parts of the world have caused any variation in the natural effectiveness, durability, and lasting beauty of Armor Coat.

NINE BEAUTIFUL COLORS AND WHITE

Armor Coat is available in 9 delicate pastel shades and white. The colors are Sage Green, Apricot, Weathered Ivory, Light Gray, Light Cream, Dark Tan, Light Tan, Light Blue, and Oyster White. These colors can be blended to achieve other beautiful shades.

WHERE NOT TO BE USED

Armor Coat is not intended for application to glazed brick or tile, hard wall plaster, or any other non-porous building material. The physical character of Armor Coat was particularly designed to permit the unique interlocking with a porous surface as described on the preceding page.

Any grease, paraffine, tallow, or other greasy or oily substance, or oil paint, already on a surface, must be removed before applying Armor Coat. Walls cast in greased forms must be washed with a 25% solution of muriatic acid, which produces an etched surface to which Armor Coat can be applied successfully. Hard, smooth, steel-troweled surfaces must likewise be etched with muriatic acid.

HOW ARMOR COAT IS APPLIED

Armor Coat is mixed with water to the consistency recommended for the particular application. When applied as a decorative finish, Armor Coat is brushed or sprayed on just the same as any other decorative finish. When brushed on, it can be applied more rapidly than most other materials, as a Dutch brush is used. The surface must first be sprayed or brushed with water.

When Armor Coat is used to seal hairline cracks, it is brushed and rubbed into the cracks in the consistency suitable to the application. For sealing larger cracks, it is mixed to a putty-like consistency, washed builders' sand being added to the Armor Coat paste in the proportion of two parts paste and one part sand.

OTHER ADVANTAGES AND BENEFITS

Besides its extraordinary waterproofing ability, and beauty, Armor Coat brings the following added advantages to the home or building owner:

(1) Longer lasting finish, saving repainting expense.
(2) Eliminates the expense and unsightliness of damp, stained interior and exterior walls.
(3) Prevents moisture damage to building and contents.
(4) Prevents excessive inside humidity.
(5) Protects health through elimination of indoor dampness.
(6) Reduces fuel bills because of dryer, warmer inside atmosphere.

ARCHITECT'S CONDENSED SPECIFICATIONS

The exterior finish (or interior or exterior wall waterproofing agent) shall be Armor Coat, which shall be mixed and applied in strict accordance with the manufacturer's directions. It shall be applied by brush, if possible, (or otherwise by spraying) to a clean surface free of any substances warned against by the manufacturer as a deterrent to a satisfactory application. The surface shall be damp when the finish is applied. When hardened and cured, the finish shall be damp-proof, and shall not powder, chip, rub off, or wash off.

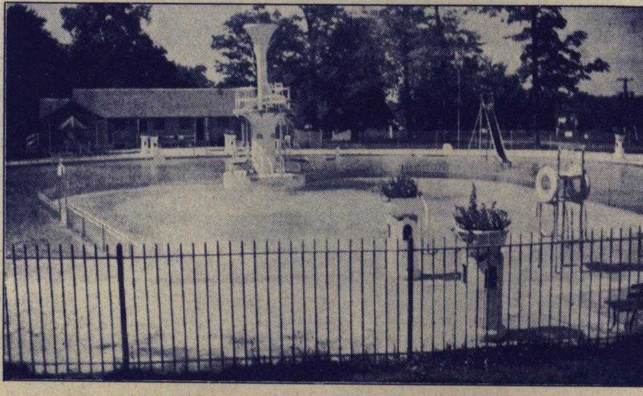
OTHER ARMOR PRODUCTS

Armorloc—A scientifically compounded tung oil base paint for stucco, brick, concrete, and other masonry wall surfaces, porous or non-porous. Particularly for application to surfaces previously painted or coated with oil-bearing materials. So opaque that usually only one coat is required.

Armorock—A hard, durable protective coating for pipe and surface insulation. Unaffected by moisture, impact, heat or cold. Sets to a hardness comparable to rock.

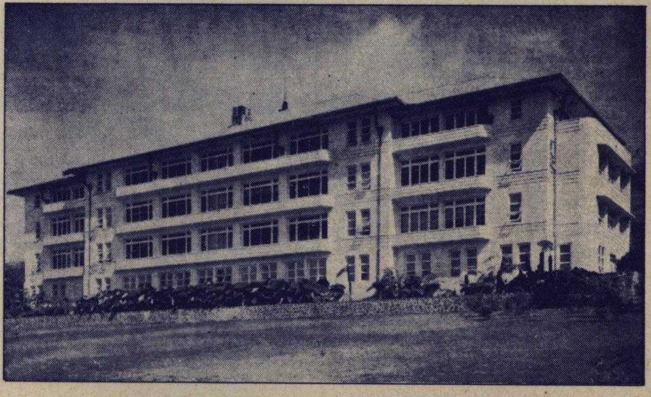
Aluminum Paint—A scientific product embodying an outstanding new synthetic vehicle for aluminum. This paint is highly resistant to rust, weather and salt air, and is unaffected by extreme cold, or heat as great as 1200° F. Can be applied over iron, steel, brick, concrete, fibre board, and wood. Ideal as a primer coat, sealing the surface so thoroughly that only one coat of oil paint is required.

Names of Representatives and Distributors Furnished on Request.



Municipal Swimming Pool, Alexandria, Ind.

One of many fine pools protected and beautified with Armor Coat
George McDermott, Manager



Kula Sanitarium, Maui, Hawaii

One of the large number of Armor Coat protected buildings in the tropics
C. W. Dickey, Architect C. E. Black, Contractor

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aterproofing, 5-5).

A.I.A. File No. **25C** 21-22-23

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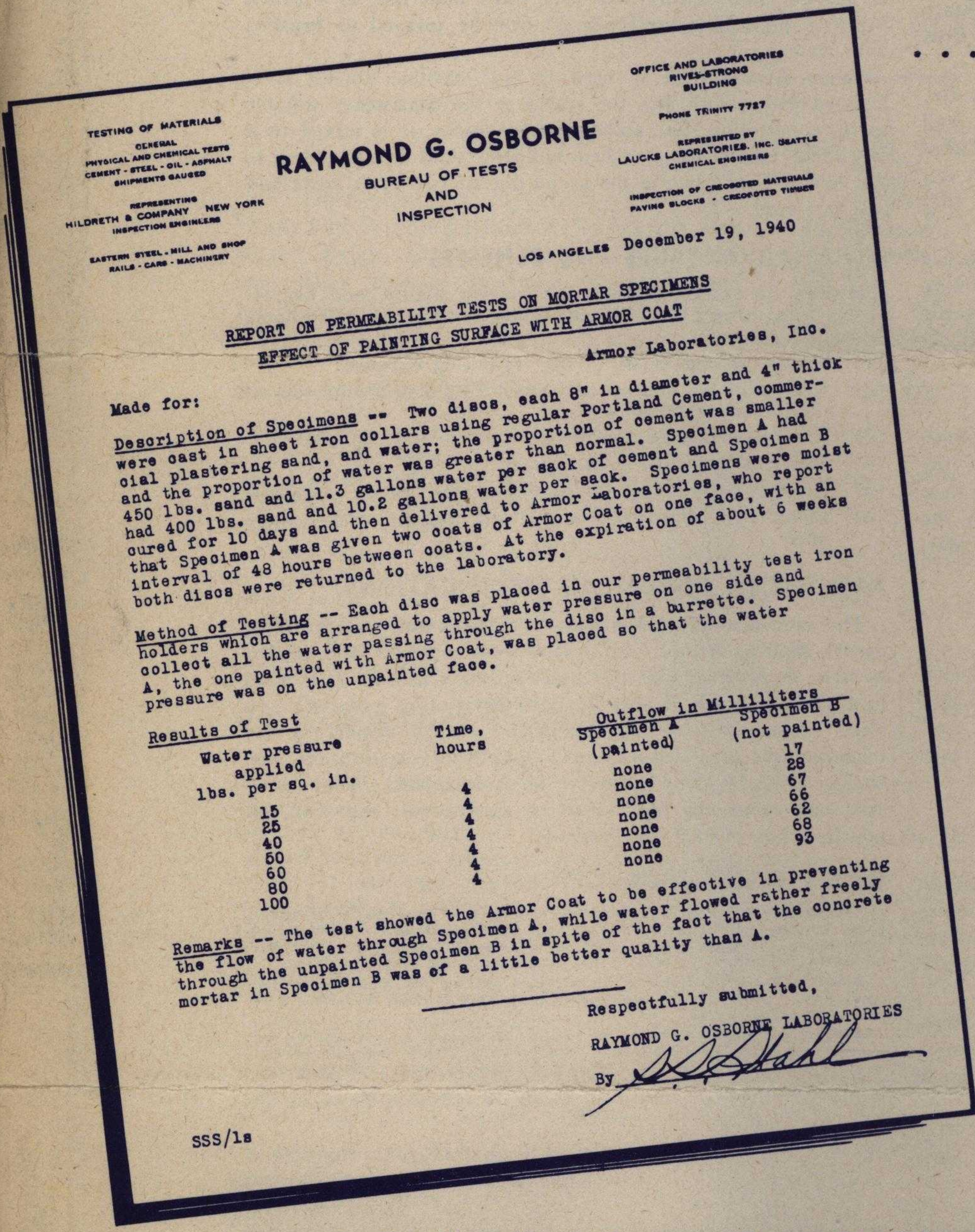
• REPORT of Independent Testing Laboratory on the Waterproofing Ability of Armor Coat



TESTING OF MATERIALS
GENERAL
PHYSICAL AND CHEMICAL TESTS
CEMENT - STEEL - OIL - ASPHALT
SHIPMENTS GAUGED

REPRESENTING
HILDRETH & COMPANY NEW YORK
INSPECTION ENGINEERS

EASTERN STEEL - MILL AND SHOP
RAILS - CARS - MACHINERY

RAYMOND G. OSBORNE
BUREAU OF TESTS
AND
INSPECTION

OFFICE AND LABORATORIES
RIVES-STRONG
BUILDING

PHONE TRINITY 7727

REPRESENTED BY
LAUCKS LABORATORIES, INC. SEATTLE
CHEMICAL ENGINEERS

INSPECTION OF CREOSOTED MATERIALS
PAVING BLOCKS - CREOSOTED TIMBER

LOS ANGELES December 19, 1940

REPORT ON PERMEABILITY TESTS ON MORTAR SPECIMENS
EFFECT OF PAINTING SURFACE WITH ARMOR COAT

Made for: Armor Laboratories, Inc.

Description of Specimens -- Two discs, each 8" in diameter and 4" thick were cast in sheet iron collars using regular Portland Cement, commercial plastering sand, and water; the proportion of cement was smaller and the proportion of water was greater than normal. Specimen A had 450 lbs. sand and 11.3 gallons water per sack of cement and Specimen B had 400 lbs. sand and 10.2 gallons water per sack. Specimens were moist cured for 10 days and then delivered to Armor Laboratories, who report that Specimen A was given two coats of Armor Coat on one face, with an interval of 48 hours between coats. At the expiration of about 6 weeks both discs were returned to the laboratory.

Method of Testing -- Each disc was placed in our permeability test iron holders which are arranged to apply water pressure on one side and collect all the water passing through the disc in a burrette. Specimen A, the one painted with Armor Coat, was placed so that the water pressure was on the unpainted face.

Results of Test

Water pressure applied lbs. per sq. in.	Time, hours	Outflow in Milliliters	
		Specimen A (painted)	Specimen B (not painted)
15	4	none	17
25	4	none	28
40	4	none	67
50	4	none	66
60	4	none	62
80	4	none	68
100	4	none	93

Remarks -- The test showed the Armor Coat to be effective in preventing the flow of water through Specimen A, while water flowed rather freely through the unpainted Specimen B in spite of the fact that the concrete mortar in Specimen B was of a little better quality than A.

Respectfully submitted,

RAYMOND G. OSBORNE LABORATORIES

By S. S. Stahl

SSS/ls

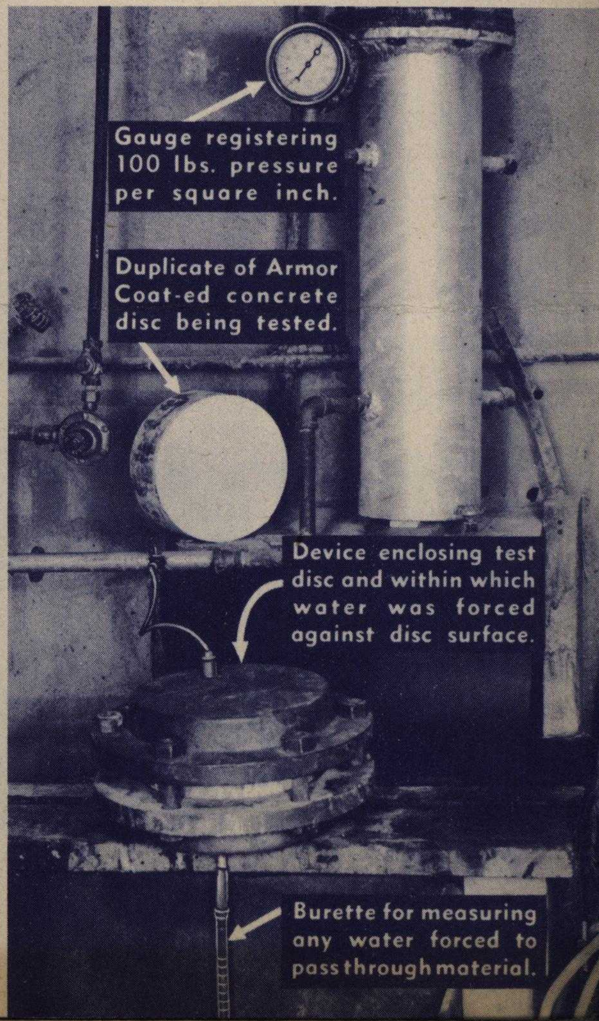
. . . Repelled Water Under Pressure of 100 lbs. per Square Inch

The ability of Armor Coat to seal against high hydrostatic pressure has long been proven in actual service by many examples of masonry walls subject to severe seepage, leakage, or actual drainage. Independent laboratory proof of this—plus an actual measure of Armor Coat's waterproofing ability—is shown at the left.

This independent test reveals that during seven test periods of four hours each a normal coating of Armor Coat on one face of a concrete disc prevented the passage of water through the disc, although the water pressure applied reached 100 pounds per square inch. In an identical test of an uncoated disc, also with the water pressure at 100 pounds per square inch, 93 milliliters of water passed through the uncoated disc.

The COATED disc was MORE receptive to the passage of water than the UN-coated disc—being of a substantially leaner mix—hence the Armor Coat coating actually sealed out an even greater flow of water than the test report states.

BELOW—Photograph of actual test set-up.


Gauge registering 100 lbs. pressure per square inch.
Duplicate of Armor Coat-ed concrete disc being tested.
Device enclosing test disc and within which water was forced against disc surface.
Burette for measuring any water forced to pass through material.

• Indicates that Armor Coat Positively Waterproofs Against the Most Severe Rainfall — and Against Any Seepage or Leakage Ever Likely to Occur in a Masonry Wall

The total number of hours of these tests and the high water pressures applied are equivalent to prolonged service of an Armor Coat coating on the exterior of a building, or on a wall subject to seepage or leakage. Furthermore, in actual service Armor Coat grows even more effective because of its physical and chemical action in becoming more and more a part of the surface as time passes. Armor Coat can be depended on for both immediate results and lasting protection.

ARMOR COAT
TRADE MARK

ARMOR LABORATORIES, Inc.
538 Commercial Street
Glendale, California

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